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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/564,303	01/10/2006	Akio Uchiyama	19476	8935

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EXAMINER	
DANEGA, RENEE A	

ART UNIT	PAPER NUMBER
3736	

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03/23/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/564,303	UCHIYAMA ET AL.	
	Examiner	Art Unit	
	Renee Danega	3736	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 December 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-17 and 34-40* is/are pending in the application.

4a) Of the above claim(s) *5* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4,6-17 and 34-40* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claim 40 is objected to because of the following informalities: Claim 4 refers to "the release position". It is unclear what is meant by this since there is no mention of a release position earlier in the claim or in independent claim 34 to which the claim refers. Appropriate correction is required.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 34, 36- 37, and 39 are rejected under 35 U.S.C. 102(b) as being anticipated by D'Andrea et al. (US 5395366).

- Regarding claim 34, D'Andrea teaches a method for acquiring in vivo information comprising introducing a plurality of in-vivo acquisition apparatuses into a body cavity, acquiring in vivo information from each of the apparatuses, and transmitting the information acquired outside the body wherein each apparatus has an identification address (column 3, lines 12-47).
- Regarding claims 36 and 37, D'Andrea teaches a step of acquiring in vivo information comprising emitting a signal from outside the body and

receiving the signal using the plurality of in-vivo information acquisition apparatuses and responding based on this signal at substantially the same time by transmitting outside the body in a close looped manner (column 4, lines 23-40).

- Regarding claim 39, D'Andrea teaches releasing apparatuses into the body cavity at different times (column 3, lines 15-25).

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-4, 6-8, 10-14, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iddan (US 20020111544) in view of Gazdzinski (US 20010051766) and Alfano et al (US 6240312).

- Regarding claims 1-3, Iddan teaches an in-vivo information acquisition apparatus comprising a specimen-collecting section (38'), a specimen evaluating section (38) a communication section (34) for receiving a signal and transmitting a signal, and a power supply section (31) (Figure 2). Iddan doesn't expressly teach a labeling section. However, Gazdzinski teaches However, Gazdzinski teaches an endoscopic probe with an RFID tag which allows for the writing or reading of multiple probes simultaneously [0223]. It would have been obvious in view of Gazdzinski

to provide a RFID label on the apparatus in order to distinguish amongst information being collected from multiple apparatuses. Iddan further doesn't teach an indwelling section for fixing to a tissue surface. However, Alfano teaches an in vivo medical diagnosis device with a indwelling or feeler (53) described as a "suction type conveyer" capable of fixing to a tissue surface. It would have been obvious in view of Alfano to provide an indwelling to control movement and fixation of the device of Iddan along it test path.

- Regarding claims 4, 7, 8, Iddan teaches an external power supply but doesn't teach it in wireless communication. However, Gazdzinski teaches a power supply control (702) that controls power supply based on when the communication sections receives a signal from the outside, wherein the power supply is an externally chargeable power storage section that is power wirelessly (Figure 7) [0348] eliminating the need for in vivo energy storage. It would have been obvious in view of Gazdzinski to provide external power control in order to eliminate the need for in-vivo storage and to conserve energy.
- Regarding claim 6, Iddan doesn't expressly teach an adhesive container for storing a biocompatible adhesive and release section. However, Gazdzinski teaches a container and release [0270] that would be capable of releasing a biocompatible adhesive. It would have been obvious in

view of Gazdzinski to provide a control release container in order to get a material to a desired area of the body.

- Regarding claim 10, Iddan doesn't teach the specimen evaluating section to include a photodetector. However, Alfano teaches an examining means comprising a photodetector (claim 23) to determine abnormalities or diseased states of a tissue (column 4, lines 11-15). It would have been obvious in view of Alfano to use a photodetector in the specimen evaluating section of Iddan for determining optical change.
- Regarding claim 11, Iddan teaches an illumination system in the device in order to have natural color reproduction of the tissue image [0044].
- Regarding claim 12, Iddan teaches the illuminating element to be a wavelength tunable light source [0044] image sensor as well as correction of the white LED [0115].
- Regarding claims 13 and 14, Iddan teaches detecting units including blood sensor and protein sensors [0008] [0009] (abstract).
- Regarding claim 17, Iddan teaches an imaging section [0046].

3. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Iddan and Gazdzinski as applied to claim 1 above, and further in view of Couvillon, Jr. (7063671).

- Regarding claim 9, Iddan doesn't expressly teach the specimen evaluation section having an ion-conducting actuator shutter for introducing the specimen. However, Couvillon, Jr. teaches using a shuttered ion control aperture to capture a specimen in vivo (abstract) (Figure 1). It would have

been obvious in view of Couvillon, Jr. to use an ion-conducting actuator shutter in order to collect a specimen sample to be tested in vivo.

2. Claims 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iddan, Gazdzinski, and Alfano as applied to claim 10 above, and further in view of Nair et al. (US 20020132226).

- Regarding claim 15, Iddan and Alfano don't teach the specimen evaluating section to function as an enzyme sensor. However, Nair teaches al electronic ingestible capsule with an enzyme sensor [0018]. It would have been obvious in view of Nair to provide for an enzyme sensing function in order to detect a condition in the body.
- Regarding claim 16, Iddan and Alfano don't teach the specimen evaluating section to function as a gene sensor. However, Nair teaches al electronic ingestible capsule with an antigen sensor [0018] and further explains that antigens are the products of specific genes [0021]. It would have been obvious in view of Nair to provide an antigen sensor to detect the presence of specific genes.

3. Claims 35 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over D'Andrea et al. as applied to claim 34 above, and further in view of Schentag et al. (US 5279607).

- Regarding claim 35, D'Andrea teaches a plurality of in vivo acquisition apparatuses in a body cavity. D'Andrea doesn't teach releasing them by introducing a medical capsule containing them into the body. However,

Schentag teaches ingesting a capsule storing a medicament and releasing the medicament at a selected site in the body (claim 32). It would have been obvious in view of Schentag to release the in vivo acquisition apparatus via this method into the body in order to be able to place them in hard to access regions.

- Regarding claim 38, D'Andrea doesn't teach releasing an in vivo information apparatus by detecting the position of the capsule medical apparatus. However, Schentag teaches tracking a capsule through the body and detecting a position causing the release of the medicament from it (claim 32). It would have been obvious in view of Schentag to release the in vivo acquisition apparatus via this method into the body in order to be able to place them in hard to access regions.

4. Claim 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over D'Andrea et al. as applied to claim 34 above, and further in view of Meron et al. (US 20020042562).

- Regarding claim 40, D'Andrea doesn't expressly teach indwelling the apparatuses on a tissue surface. However, Meron teaches indwelling in vivo information acquisition apparatuses on a tissue surface in a body cavity in order to sense characteristics of a site over a period of time [0037]. It would have been obvious in view of Meron to indwell in vivo information devices in order to sense characteristics at the particular site over a period of time.

Response to Arguments

5. Applicant's arguments filed 12/23/08 have been fully considered but they are not persuasive. Applicant argues that the Alfano reference doesn't teach an indwelling section for affixing to a tissue surface in the body cavity. The examiner respectfully disagrees and points out the suction-type conveyor belt permits the device of Alfano to temporarily affix each portion as it moves along the internal organ such that the device is not merely floating through the organ but traveling along a wall of it. Regarding applicants argument of claim 34 and D'Andrea not teaching the method of temporarily indwelling the devices in a body cavity, the devices are inserted, or indwelling, in various organs of the body for various periods of time as they progress through the alimentary canal and thus inherently indwelling temporarily in each organ (abstract).

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Renee Danega whose telephone number is (571)270-3639. The examiner can normally be reached on Monday through Thursday 8:30-5:00 eastern time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Max Hindenburg can be reached on (571) 272-4726. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RAD

/Max Hindenburg/

Supervisory Patent Examiner, Art Unit 3736